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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TRAN, NHAN T

ART UNIT PAPER NUMBER

2615

DATE MAILED: 07/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/274,771

Applicant(s)

SHIOJI, MASAHIRO

Examiner

Nhan T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/12/2005 & 3/31/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/12/2005 & 3/31/2005 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claim 7 have been considered but are moot in view of the new ground of rejection.

3. Applicant's arguments with respect to claims 1, 3-6, 9 & 11-14 have been fully considered but they are not persuasive.

On pages 10-12 of the Remarks, the Applicant asserts:

(1) Kawamura does not include the singly picked up image reproduction mode and the continuously picked up image reproduction mode, one cannot distinguish the image picked up in the single image pickup mode from that pickup from the continuous image pickup mode by the reduced image reproduced and displayed (four-screen multi).

(2) Kuba does not presume separate display of reduced images corresponding to different kinds of images. Therefore, the Kuba reference cannot be naturally combined with the Kawamura reference.

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(3) Kawamura and Kuba, alone or in combination, fail to teach or suggest the features of base claims 1 & 9: the “normal picked up image reproduction mode” and the “continuously picked up image reproduction mode”, in combination with other claimed features.

In response, the Examiner respectfully disagrees with the Applicant:

For assertion (1), Kawamura does teaches the singly picked up image reproduction mode and the continuously picked up image reproduction mode as shown in Figs. 7B & 7C and col. 8, lines 43-60 & col. 9, lines 38-42, wherein the images picked up in a continuous image pickup mode are replayed in form of index D which corresponds a continuously picked up image reproduction mode since the type of reproduction illustrated by the index D is dedicated for displaying only continuous images; similarly, the images picked up in a normal image pickup mode are replayed in a separate screen in form of index C which corresponds to a normally picked up reproduction mode. Thus, one can distinguish the image picked up in the single image pickup mode from that pickup from the continuous image pickup mode by the reduced images reproduced from the above mentioned separate display modes.

For assertion (2), since the separate display of reduced images corresponding to different kinds of images has been taught by Kawamura, Kuba is not relied upon for such a teaching. Kuba's reference is relied for teaching on how different kinds of images are classified and formed in directories of a storage unit as well as selections of images from the directories for displaying.

For assertion (3), the Examiner respectfully submits the same analysis provided in (1) above. Therefore, the combination of Kawamura and Kuba meets the claimed limitations of the independent claims 1 & 9.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al (US 5,576,759) in view of Anderson et al (US 5,986,701).

Regarding claim 7, Kawamura discloses a digital camera (Fig. 2), having a normal image pickup mode (in response to switch 11 without selecting switch 12) in which images of an object is picked up one by one, and a continuous image pickup mode (in response to switch 12) in which images of an object are picked up continuously (see col. 5, lines 9-30), comprising:

display unit displaying an image (col. 2, lines 17-29 and col. 6, lines 31-43);

memory unit (3, 4, 7) storing an image (Fig. 2);

Kawamura also discloses that the display unit does not simultaneously display both reduced images obtained from the normal pickup mode and the continuous image pickup mode on one screen (see Figs. 7B & 7C; col. 8, lines 43-60, wherein reduced images from continuous pickup mode is displayed as index D in the whole display screen separately from display of index C of normal pickup images).

Kawamura also discloses that the control unit 104 and classification unit 103 classify images into groups, i.e., a continuous pickup image group, a single pickup image group, etc. and

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store both reduced images and their corresponding full-size images onto a recording medium 102/memory card 7. See col. 3, line 62 – col. 5, line 8. Kawamura further discloses that the continuous picked up images are classified into groups session by session (col. 6, lines 22-31).

However, Kawamura does not explicitly describe that directories are formed and that first and second writing units respectively write single picked up images into one directory and a group of continuous picked up images into another directory, wherein the one of said directories and said another directory belong to a same layer.

As taught by Anderson, images picked up in a single pickup mode of a digital camera are classified and stored in one directory (i.e., a subfolder for storing Still Images under Natural Group Folder or under Programmed Group Folder, see Fig. 6) while images picked in a continuous mode is classified and stored in another directory (i.e., a subfolder for storing Movie Files under Natural Group Folder or under Programmed Group Folder, see Fig. 6) of a storage device. Anderson clearly shows that the subfolder of Still Images and the subfolder of Movie Files are always belonging to a same layer (same layer of subdirectory). See Fig. 6 and col. 5, lines 15-50. Storing image data in such a hierarchical structure permits easier data management and retrieval (see Anderson, col. 2, lines 16-26).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Kuba and Anderson Kawamura to implement a storing unit that would form directories, first writing unit and second writing unit to classify and write images picked up in a single mode into one directory and images in a continuous mode into another directory of the same directory layer with the layer for storing the single picked up images so that different kinds of image data would be easily managed and retrieved during reproduction process.

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5. Claims 1, 3-6, 9, 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al (US 5,576,759) in view of Kuba et al (US 5,806,072).

Regarding claim 1, Kawamura discloses a digital camera (Figs. 1 & 2; col. 1, lines 10-12), having a normal image pickup mode in which images of an object are picked up one by one, a continuous image pickup mode in which images of an object are picked up continuously (col. 5, lines 9-30), a normally picked up image reproduction mode (Fig. 7B) in which an image picked up in said normal image pickup mode is reproduced and a continuously picked up image reproduction mode (Fig. 7C) in which an image picked up in said continuous image pickup mode is reproduced, comprising:

memory unit (3, 4, 7 shown in Fig. 2) storing an image;

display unit for displaying an image (col. 2, lines 17-29 and col. 6, lines 31-43);

first writing unit (classification unit 103 and/or control unit 104) for storing each image picked up in said normal image pickup mode in said memory unit (col. 3, line 62 – col. 5, line 8);

second writing unit (also classification unit 103 and/or control unit 104) classifying into groups and storing in said memory unit a plurality of images picked up in said continuous image pickup mode, session by session (col. 3, line 62 – col. 5, line 8 and col. 6, lines 22-30);

wherein said display does not simultaneously display both reduced images obtained from the normal pickup mode and the continuous image pickup mode on one screen (see Figs. 7B & 7C; col. 8, lines 43-60, wherein reduced images from continuous pickup mode is displayed as

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index D in the whole display screen separately from display of index C of normal pickup images);

said second writing unit forms a reduced image of each image and stores the reduced image together with each image to said memory unit (col. 4, line 55 – col. 5, line 7, wherein full size image and its reduced image are temporarily buffered in buffers 3 & 4 and then written into the memory card 7).

Kawamura does not specifically disclose first selecting unit selecting, in said normally picked up image reproduction mode, a desired image among images stored in said memory unit; second selecting unit selecting, in said continuously picked up image reproduction mode, a desired image group among image groups stored in said memory unit, and a desired image among a plurality of images belonging to the image group; first reading unit taking out the image selected by said first and second selecting units from said memory unit and applying the image to said display unit; third selecting unit selecting, in said continuously picked up image reproduction mode, a predetermined number of reduced images among reduced images of predetermined images in respective image groups stored in said memory unit; and second reading unit for reading the prescribed number of reduced images selected by said third selecting unit from said memory unit, forming an image of one image plane from said predetermined number of reduced images, and applying the image to said display unit; wherein said second selecting unit selects said image group by selecting a desired reduced image from the predetermined number of reduced images displayed on said display unit.

Kuba teaches a digital camera that has a selecting unit (11b, 11c, see Figs. 3-6) selecting, in the normal picked up image reproduction mode, a desired image among images stored in the

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memory unit (see Figs. 3-6; col. 16, lines 9-15 for selection of frame, such as a single image frame of file A, B or C in the root directory);

another selecting unit (11d, 11e) selecting, in the continuously picked up image reproduction mode, a desired image group (i.e., the image group 32-35 as shown in Figs. 25(A) & (B)) among image groups stored in the memory unit, and a desired image (i.e., 33 or 34) among the plurality of images belonging to the image group (see Figs. 69 & 88; col. 15, lines 18-23 for selection of a directory, such as subdirectory 01 where stored continuous picked up images are selected for reproduction);

a reading unit for taking out the images selected by the first and second selecting unit from the memory unit and applying the image to the image display unit (see col. 21, line 61 – col. 22, line 14).

As also shown by Kuba in Fig. 3 and col. 15, lines 18-23, the frame selection and directory selection (buttons 11) is used for selecting an image to be played (enlarged) on the display unit from a plurality of thumbnail images being displayed that are from in either root directory or subdirectory. Such the teaching of Kuba meets “third selecting unit selecting, in the continuously picked up image reproduction mode, a predetermined number of reduced images among reduced images of predetermined images in respective image groups stored in the memory unit; and second reading unit for reading the prescribed number of reduced images selected by the third selecting unit from the memory unit, forming an image of one image plane from the predetermined reduced images and applying the image to the display unit, wherein the second selecting unit selects the image group by selecting a desired reduced image from the predetermined number of reduced images displayed on the display unit.”

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Therefore, it would have been obvious to one of ordinary skill in the art to modify the digital camera in Kawamura to include the features taught by Kuba to arrive at the Applicant's claimed invention for selecting and reading out a desired image and/or a predetermined number of reduced images among a plurality of images stored in the memory so as to display the image or images in response to the user's selection in a conventional image reproduction fashion.

Regarding claim 3, Kuba also discloses the digital camera that has a continuous reproduction mode (i.e., continuous play) in which a plurality of images belonging to a selected image group are continuously reproduced (see Fig. 65; col. 32, lines 25-28), and

third reading unit taking, in the continuous reproduction mode, a plurality of images belonging to the image group selected by the second selecting unit and continuously applying the images to the image display unit (see Fig. 68; col. 34, lines 11-32).

Regarding claim 4, the digital camera in Kuba also has a moving mode for moving an image (Fig. 32(A)-(C)), and the camera comprises:

moving unit for physically rearranging a plurality of predetermined data records within the storage medium (shown in Fig. 32). The data rearrangement shown by Fig. 32 clearly presents extracting an image selected by the second selecting unit from the image group to which the image belongs, and storing the extracted image to the storing unit of the same directory as with an image pickup in the normal pickup mode (see col. 24, lines 22-37).

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Regarding claim 5, Kuba further discloses that the digital camera has a copy mode for copying an image and comprises:

copying unit copying image data files within the storage medium (shown in Figs. 60 & 130). This indicates copying unit for forming a copy image of an image selected by the second selecting unit and storing the copied image in the memory unit of the same directory as for an image picked up in the normal image pickup mode (see col. 31, lines 14-29 & col. 47, line 27).

Regarding claim 6, the digital camera of Kuba also has a deletion mode (DEL) for deleting stored image data (see Fig. 36), comprising:

first deletion unit for deleting the image selected by the first and second selecting unit among images stored in the memory unit (col. 26, lines 28-29);

inherent second deletion unit for deleting an image group selected by the second selecting unit among image groups stored in the memory unit (col. 26, lines 28-29). Since the image groups are constructed with the hierarchical directory and tree display method, it is inherent for the image group to be deleted due to such directory structure.

Regarding claim 9, see the analysis of claim 1, wherein Kuba teaches that directories are formed for storing the images picked up in normal pickup mode in one of said directories (i.e., root directory) and classifying into groups and storing a plurality of images picked up in said continuous image pickup mode, session by session of continuous image pickup, in another of the directories (i.e., subdirectory) of a storage device, and that first writing unit (system controller) writing each image picked up in said normal image pickup mode to one of said directories, and

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second writing unit (also system controller) writing a plurality of images picked up in said continuous image pickup mode, classified into groups session by session of continuous image pickup, in said another directories. See Kuba, Figs. 5, 24, 25, 69 & 88; col. 21, lines 46-60.

Regarding claims 11-14, see the analyses of claims 3-6, respectively.

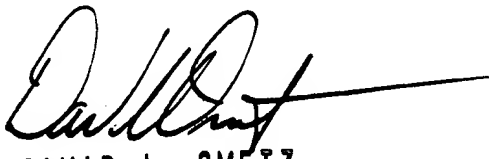
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Thursday, 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NT.


DAVID L. OMETZ
PRIMARY EXAMINER